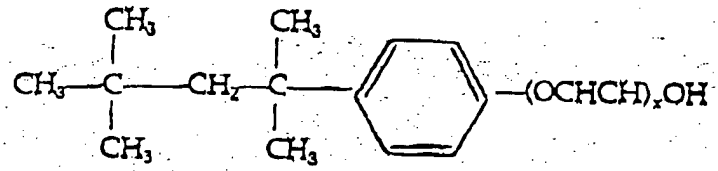
We claim:

1. A method of improving shrink-resistance of natural fibers, synthetic fibers, or mixtures thereof, or fabrics or yarns composed of natural fibers, synthetic fibers, or blends thereof, comprising contacting said fibers or fabric or yarn with NaOH, H_2O_2, gluconic acid, dicyandiamide, and non-ionic surfactant, and optionally subsequently contacting said fibers or fabric or yarn with protease and non-ionic surfactant and optionally sodium sulfite and optionally triethanolamine and optionally polyacrylamide polymer.

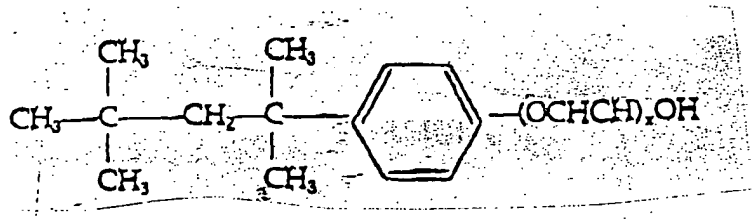
2. The method according to claim 1, wherein said non-ionic surfactant is an alkylaryl polyether alcohol having the following structural formula:



in which x indicates the average number of ethylene oxide units in the ether side chain and x ranges from 7 to 10.

3. The method according to claim 1, said method comprising contacting said fibers or fabric or yarn with NaOH, H_2O_2, gluconic acid, dicyandiamide, and non-ionic surfactant, and subsequently contacting said fibers or fabric or yarn with protease and optionally sodium sulfite and optionally triethanolamine and optionally polyacrylamide polymer.

4. The method according to claim 3, wherein said non-ionic surfactant is an alkylaryl polyether alcohol having the following structural formula:

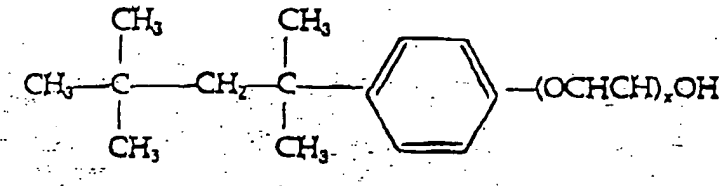


in which x indicates the average number of ethylene oxide units in the ether side chain and x ranges from 7 to 10.

5. The method according to claim 4, wherein x is 9 to 10.

6. The method according to claim 1, said method comprising contacting said fibers or fabric or yarn with NaOH, H_2O_2, gluconic acid, dicyandiamide, and non-ionic surfactant; said method does not utilize protease.

7. The method according to claim 6, wherein said non-ionic surfactant is an alkylaryl polyether alcohol having the following structural formula:

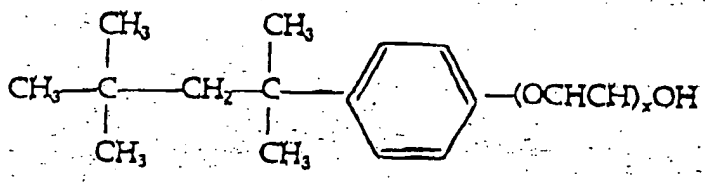


in which x indicates the average number of ethylene oxide units in the ether side chain and x ranges from 7 to 10.

8. The method according to claim 7, wherein x is 7 to 8.

9. The method according to claim 1, said method comprising contacting said fibers or fabric or yarn with NaOH, H_2O_2, gluconic acid, dicyandiamide, and non-ionic surfactant, and subsequently contacting said fibers or fabric or yarn with protease, sodium sulfite, triethanolamine, and non-ionic surfactant, and optionally polyacrylamide polymer.

10. The method according to claim 9, wherein said non-ionic surfactant is an alkylaryl polyether alcohol having the following structural formula:



in which x indicates the average number of ethylene oxide units in the ether side chain and x ranges from 7 to 10.

11. The method according to claim 10, wherein x is 7 to 8.

12. The method according to claim 1, wherein said method does not utilize dichloroisocyanuric acid, chloroamines, peroxymonosulfuric acid, monoperoxyphthalic acid, permanganate, chlorine gas, sodium hypochlorite, or aminoplast resins.

13. The method according to claim 3, wherein x is 7 to 8 or 9 to 10.

14. A product produced by the method according to claim 1.